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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,435	12/03/2001	Shunpei Yamazaki	SEL 132 DIV 1	1752

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CHICAGO, IL 60606

EXAMINER

QI, ZHI QIANG

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 10/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/005,435

Applicant(s)

YAMAZAKI ET AL.

Examiner

Mike Qi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 36-77 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-77 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/329/597.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 36-77 are rejected under the judicially created doctrine of double patenting over claims 1-81 of U. S. Patent No. 6,384,886 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

1) Claims 36-56 of this application claimed a method of manufacturing a display device. Claims 1-81 of the patent claimed an active matrix type display device, and the device is produced by the forming method of the claims 36-56.

The subject matter of the claims 36, 43 and 50 of this application, such as forming a body with a textured surface on the pixel electrode, forming a light reflection film on the body with the textured surface, flattening a surface of the

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light reflection film and the light reflection film has a higher refractive index than the body with the textured surface, is fully disclosed in the patent (for example, the claims 1, 61, 72 of the patent, such as a body with a textured surface formed on the first electrode, a light reflection film comprising a material having a higher refractive index than that of the body and having a flat surface, the light reflection film formed over the first electrode and the body).

Concerning the limitations of forming a thin film transistor (TFT) over a substrate, forming a pixel electrode connected to the thin film transistor were common and known in the art as the switching element using transistor to control the turn on and off and connected to the pixel electrode for obtaining the image. Such as the US 5,805,252 (Shimada et al) disclosed the liquid crystal display using TFT and the pixel electrode connected to the TFT (see Fig.14).

<sup>(claim 73)</sup>  
Concerning the limitation of flattening a surface of the light reflection film by a CMP process was common and known in the art as using the CMP (Chemical Mechanical Polishing) process for achieving high-flatness, mirror-like surface and high reflectance. Such as the US 6,049,132 (Iwahashi et al) disclosed using the CMP method to provide a high-flatness, mirror-like surface (see col.1, lines 43-45).

<sup>(claims 78-83)</sup>  
Concerning the limitation "forming a light reflection film on the body with the texture surface by one selected from the group consisting of a sputtering method, a coating method, and a vacuum evaporation method" was a conventional method using sputtering technique to form a light reflector on the

claims  
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body with the texture surface to increase the intensity of light scattered in the direction perpendicular to the display screen. Such as the US 5,805,252 (Shimada et al) discloses (col.2, line 35 – col.3, line 46; Fig.6) that the reflector (50) includes a thin insulating layer (53) and metallic thin film (52) having a roughened surface in which a metallic thin film is formed by using a sputtering technique, and that would have been at least obvious.

Concerning the limitations claimed in claims 37-41, 44-48, 51-55 is fully disclosed in the claims such as claims 65, 69, 62, 70 and 71 of the patent.

Concerning the claims 42, 49 and 56, all the limitations only given weight as intended use. Any display can be used for those products, and that would have been at least obvious.

2) Claims 57-77 of this application claimed a method of manufacturing a display device. Claims 1-81 of the patent claimed an active matrix type display device, and the device is produced by the forming method of the claims 57-77.

The subject matter of the claims 57-77 of this application, as the explanation above, is fully disclosed in the patent except that forming an insulated gate field effect transistor on a semiconductor substrate.

However, TFT and FET functions the same switching elements and that was common and known in the art as the dependent on the different application. The prior art of record, such as US 6,307,214 (Ohtani et al) discloses (col.14, lines 19-27) that the switching performance data value is approximately equal to the insulated-gate field effect transistor (IGFET), and US 6,163,055 (Hirakata et

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al) discloses (col.4, lines 57-61) that the typical semiconductor element is TFT, in addition, the semiconductor element is an IGFET or the like.

Therefore, using IGFET or TFT as a switching element would have been at least an obvious variation.

Concerning the limitation "forming a light reflection film on the body with the texture surface by one selected from the group consisting of a sputtering method, a coating method, and a vacuum evaporation method" was a conventional method using sputtering technique to form a light reflector on the body with the texture surface to increase the intensity of light scattered in the direction perpendicular to the display screen. Such as the US 5,805,252 (Shimada et al) discloses (col.2, line 35 – col.3, line 46; Fig.6) that the reflector (50) includes a thin insulating layer (53) and metallic thin film (52) having a roughened surface in which a metallic thin film is formed by using a sputtering technique, and that would have been at least obvious.

3. Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

### ***Response to Arguments***

4. Applicant's arguments filed on Jul.22, 2002 have been fully considered but they are not persuasive.

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Applicant's **only** arguments are as follows:

1) The amended each independent claims "forming a light reflection film on the body with the textured surface by one selected from the group consisting of a sputtering method, a coating method, and a vacuum evaporation method" are patentably distinct from those in the US 6,384,886 patent, and that would be allowable.

Examiner's responses to Applicant's **only** arguments are as follows:

1) Concerning the limitation "forming a light reflection film on the body with the texture surface by one selected from the group consisting of a sputtering method, a coating method, and a vacuum evaporation method" was a conventional method using sputtering technique to form a light reflector on the body with the texture surface to increase the intensity of light scattered in the direction perpendicular to the display screen. Such as the US 5,805,252 (Shimada et al) discloses (col.2, line 35 – col.3, line 46; Fig.6) that the reflector (50) includes a thin insulating layer (53) and metallic thin film (52) having a roughened surface in which a metallic thin film is formed by using a sputtering technique, and that would have been at least obvious.

**Conclusion**

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Qi whose telephone number is (703) 308-6213.

The examiner can normally be reached on 349.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Sikes can be reached on (703) 308-4842. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7721 for regular communications and (703) 308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Mike Qi  
September 3, 2002

  
TOANTON  
PRIMARY EXAMINER